## Lamar Advertising provides GM with Innovative Digital Billboards using Canon and Milestone IP Video integrated with Worknet Analytics

### The Challenge

General Motors (GM) was seeking a new way to reach potential buyers and highlight the key features of its new Chevy Malibu. To find a solution, GM worked with Posterscope USA Out-of-Home Specialist and Lamar Advertising, one of the largest outdoor advertising companies in North America. With more than 325,000 displays—2,400 of them large format digital billboards—Lamar is constantly looking for new ways for clients like GM to amplify their campaigns.

Lamar Advertising wanted to create a campaign for GM that maximized the flexibility and creativity that digital billboards provide. Lamar's Director of Digital Innovation and Sales Strategy, Ian Dallimore, was inspired by a campaign for Porsche in Australia. It utilized open platform video technology to identify incoming vehicles and trigger targeted content to those vehicles within seconds.

### The Solution

To create the solution, Dallimore worked with Worknet Analytics, the video analytics integrator that created the solution used for the Porsche campaign in Australia, as well as a similar campaign for Lexus in New Zealand. The solution

**Organization**
Lamar Advertising
Posterscope
General Motors

**Location**
USA

**Industry Segment**
Beyond Security

**System Integrator(s)**
Worknet Analytics

**Milestone Partner(s)**
Worknet Analytics
Canon

**Solution**
XProtect Corporate

**Number of cameras**
N/A

includes Canon VB-H43 network cameras mounted on another Lamar billboard about 1,000 feet ahead of the digital billboard. This allows enough time for the data to be transmitted, a new targeted image to be delivered and time for the driver to look, read and pass it.

The cameras feed into Milestone XProtect Corporate video management software (VMS), which has an open platform that enables interoperability with other systems. Worknet Analytics' solution integrates the VMS with proprietary analytics for car recognition that matches vehicles against a database of those with the same make and model.

## Advantages

The custom-built solution immediately recognizes the target audience based on their vehicles and delivers custom billboard advertisements accordingly. The Canon network cameras can be remotely operated and provide high-resolution images of the cars. The Milestone VMS is able to manage different video data streams and resolutions without delays or technical difficulties, ensuring targeted messages are viewable on the digital billboards when the intended audience drives by.

## Worknet Company Profile

With offices in Treasure Island, Florida, Melbourne, Australia, and Copenhagen, Denmark, Worknet is a global provider of video analytic solutions for the transport, automotive, traffic engineering and survey industries.

The company's primary focus is to provide unique video analytic solutions outside of the security and surveillance market. Worknet's multi-patent-pending Road Exchange Analyzer software, for example, is the first application available to accurately gather vehicle intersection turning movement data.

Currently with 10 employees and growing, Worknet is well positioned to contribute to the fast-paced, $285 billion video analytics market. Worknet also provides data center hosting and management services for their customers.

## Solution Gets National Recognition

The Chevy Malibu campaign was the first of its kind in the United States and was rolled out to a total of six billboards in New Jersey, Chicago and Dallas. Dallimore has worked for Lamar for 11 years and says he's never before seen so much excitement and attention around a campaign.

"The client was ecstatic with the results and the amount of press they got," Dallimore said. "The story was on the front page of the Chicago Tribune, which in itself was worth the entire campaign."

The campaign ran for three months and Dallimore says they've received

> " In our medium it's usually just mass media, but this solution enables us to actually have a one-on-one conversation with very specific people. It's really neat to be able to call out our target audience.

**Ian Dallimore**
**Director of Digital**
**Innovation & Sales Strategy**
**Lamar**



NISSAN ALTIMA · NISSAN ALTIMA · MATCH
**VEHICLE FRONT GRILL MATCH**
Confidence Level: 95%



IDENTIFYING GRILL · TOYOTA PRIUS · REJECTED

requests from numerous automotive companies and dealerships interested in using the technology for a campaign of their own.

"In our medium it's usually just mass media, but this solution enables us to actually have a one-on-one conversation with very specific people," Dallimore said. "It's really neat to be able to call out our target audience."

## Excellent Support and Product Impresses Partner

President of Worknet Analytics Michael Maziarka designed and implemented the Milestone-based solution. He is extremely happy with both the VMS and the amount of support he's received from Milestone.

"Given that we are a start-up and very entrepreneurial, we could not be happier with the support we've received from Milestone," Maziarka said. "The dialogue, communication and feedback has all helped create a great relationship."

Maziarka could not be more pleased with the Milestone VMS, its performance and open platform architecture that enables integration with other technologies to make up the digital billboard solution.

"There are so many moving parts to this technology, so when we find something that is solid and doesn't give us any problems, we are really thrilled — and Milestone is one of those products," Maziarka said. "It incorporates nicely into our software, which has some IBM code. It's one of those things we are extremely pleased with and happy we found."

## Unique Application Requires Many Considerations

The advertising industry is not generally accustomed to using so much integrated technology, which made the Chevy campaign possible.

Maziarka says that there are several elements that come into play for success, including the angle of the camera in relation to the road, speed of vehicles and lighting. Because conditions vary at each location, multiple images of targeted brands and models are gathered from every camera. The images are used to create a database, which is then used to identify targeted cars as they pass by the cameras. The system identifies vehicles based on just the front 25 percent of the vehicle.
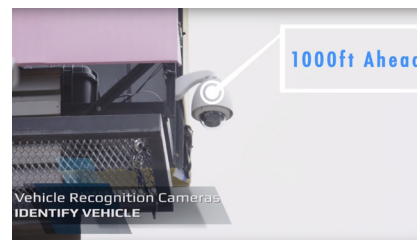
"We use that information the same way you would use facial recognition technology, using a database we created based on the perspective of each camera," Maziarka said.

Camera placement is also a key element to making the campaign possible. Considering laws that limit the amount of time that must pass before billboard images can be changed and the time it takes for a targeted driver to reach

> "
> Given that we are a start-up and very entrepreneurial, we could not be happier with the support we've received from Milestone. The dialogue, communication and feedback has all helped create a great relationship.
>
> **Michael Maziarka**
> **President**
> **Worknet Analytics**

the ad and see it, Worknet calculated the cameras should be placed about 20 seconds—or about 1,000 feet—in front of the digital billboards.

"This provides enough time for the system to recognize the vehicle type, talk to the cloud base, which then talks to our network operating system, then dynamically change out the content—all in enough time for the driver to actually notice it," Maziarka said.

Dallimore said locations are somewhat limited because they also have to consider if there's an exit before or after the camera so they don't lose their target audience before they reach the billboard.

No images are stored, although data from the analytics is captured and transmitted back to Lamar's operation center in Baton Rouge, Louisiana. This data even includes a confidence level about the accuracy of matching specific vehicles.

## Opening Doors for Future Uses

According to Maziarka, this technology has dozens of other possible applications and several are already in progress. He is working on a pilot program that utilizes the Milestone VMS to monitor and alert freight delivery areas in New York City. Departments of Transportation and civil engineering firms are also using the solution to gather data.

Establishments on private property, such as parking garages and drive-thru restaurants can also implement similar solutions combined with license plate recognition for loyalty programs and a variety of other uses.

"This technology has an incredible amount of other applications and use cases," Maziarka said. "The automotive and advertising industry has just implemented it first."
consider if there's an exit before or after the camera so they don't lose their target audience before they reach the billboard.

No images are stored, although data from the analytics is captured and transmitted back to Lamar's operation center in Baton Rouge, Louisiana. This data even includes a confidence level about the accuracy of matching specific vehicles.

> "
> There are so many moving parts to this technology, so when we find something that is solid and doesn't give us any problems, we are really thrilled — and Milestone is one of those products.
>
> **Michael Maziarka**
> **President**
> **Worknet Analytics**

**For news and viewpoints from Milestone Systems visit** The Milestone Post

Use of trademarks

POSSIBLE
STARTS
HERE